

Begin

Begin

#653

L 25530-66 EWT(m)/ENP(w)/T/ENP(t) JD/DJ

ACC NR: AP6015646

(A)

SOURCE CODE: UR/0413/66/000/009/0055/0055

INVENTOR: Ravikovich, A. M.; Zolotova, I. D.; Garzanov, G. Ye.; Vinner, G. G.; 4/3  
Petyakina, Ye. I.; Obleukhova, O. S.; Borshchevskiy, S. B.; Bagryantseva, P. P. 13

ORG: none

TITLE: Preparative method for antiwear additives.<sup>18</sup> Class 23, No. 181223

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 55

TOPIC TAGS: antiwear additive, monoolefin polymer, sulfurization

ABSTRACT: An Author Certificate has been issued for a preparative method of antiwear additives by sulfurization of monoolefin polymers at 140—180C. [B0]

SUB CODE: 11/ SUBM DATE: 16Jul64/ ATD PRESS: 4255

Card 1/1

L 08169-67 EWT(m)/EWP(t)/ETI IJP(c) JD  
 ACC NR: AP6024859 SOURCE CODE: UR/0056/66/051/001/0025/0027

AUTHOR: Verkin, B. I.; Chekin, V. V.; Vinnikov, A. P.

ORG: Physicotechnical Institute of Low Temperatures, Academy of Sciences, Ukrainian SSR (Fiziko-tehnicheskii institut nizkikh temperatur Akademii nauk Ukrain'skoy SSR)

TITLE: Effect of impurities on isomer shifts in metallic tin

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 51 no. 1, 1966, 25-27

TOPIC TAGS: tin, Mossbauer effect, nuclear isomer, low temperature research, absorption spectrum, line width, impurity center, nuclear resonance

ABSTRACT: To check whether it is correct to ignore the changes in the properties of the host in studies of the Mossbauer effect, the authors have determined the isomer shifts for  $\text{Sn}^{119}$  in natural (metallic) tin to which Na, Zn, Cd, Ge, In, Sb, Pb, or Bi was added as an impurity. The source of the resonant  $\gamma$  radiation was  $\text{Mg}_2\text{Sn}^{119}$ ; the source and absorber were maintained at liquid-nitrogen temperature. In all cases the absorption spectra consisted of singlet lines with half-widths that did not differ appreciably from those of pure tin having the same thickness. The shift was determined from the difference in the counting rate at source velocities corresponding to the maximum slope of the pure-tin absorption line, and was also checked by determining the absorption-line center of gravity for the impure tin. The spectra show that a relatively small amount of impurity has some effect on the density of the s-electrons in tin nuclei. However, the impurities do not all have the same effect with regard to

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ACC NR: AP6024859

isomer shifts. Within the limits of experimental error, the presence of Ge, Pb, In, Sb, or Bi in tin has no effect on the isomer shift. With Zn or Cd, the isomer shift is enhanced, and starting with a concentration ~0.5 at.% the shift remains approximately constant at  $0.06 \pm 0.02$  mm/sec. The pattern is similar for Na, but the isomer shift lies systematically between the shifts for pure tin and tin doped with Zn or Cd. It is proposed on this basis that the impurity changing the isomer shift is the one having valence s-electrons. Consequently, when the properties of metal lattices are investigated by the Mossbauer effect for impurity atoms, the impurity concentration cannot be chosen arbitrarily in the general case. The authors thank L. S. Kucushkin for a discussion of the results, and P. N. Aleksandrov for providing the pure metal samples. /6  
Orig. art. has: 2 figures and 1 formula.

SUB CODE: 20/ SUBM DATE: 21Jan66/ OTH REF: 003

Card 2/2 nst

L 10874-67 EWT(1)/EWT(m) RO  
ACC NR: AP6009038 (A)

SOURCE CODE: UR/0018/65/000/011/0032/0036

AUTHOR: Vinnikov, V. (Colonel)

ORG: None

TITLE: Determining the parameters of nuclear bursts

SOURCE: Voyennyy vestnik, no. 11, 1965, 32-36

TOPIC TAGS: nuclear blast effect, nuclear explosion, nuclear protective equipment, nuclear safety, nuclear warfare, nuclear warfare training, explosive nuclear weapon ~~specialized training, military training, training aid~~

ABSTRACT: A practical training exercise on the subject is presented. Time, type, power, and epicenter of a nuclear burst, as well as wind data, are required to forecast the radiation situation. Burst data as to external appearance, flash duration, time between burst and sound, direction, angular size of the luminescent cloud, and cloud elevation are needed to determine certain of the parameters and the basic indicators distinguishing air and ground nuclear bursts are presented and the different appearances of the two types of bursts are described. Simple range/azimuth and resection methods of locating epicenter are described. A method of determining slant range by a scale drawing on a map of the triangle formed by the observation post,

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ACC NR: AP6009038

epicenter, and angle of site to the top of the cloud is described. The power of a burst can also be determined by using a nomogram based on the speed of the rising cloud. A method of compensating for wind displacement is presented. Protected observation is discussed. Orig. art. has: 1 figure.

SUB CODE: 18, 15/SUBM DATE: None

Card 2/2

BOGOMOLOV, Anatoliy Mikhaylovich; KOROBV, Boris Vladimirovich;  
VINNIKOVA, I.A., red.

[Programming for the "Ural-2" and "Ural-4" digital computer]  
Programmirovaniye dlia EVM "Ural-2" i "Ural-4". Saratov, Izd-  
vo Saratovskogo univ., 1965. 482 p. (Main 18:10)



RIVKIN, S.L., kand. tekhn. nauk; VINNIKOVA, A.N., inzh.

Heat capacity of ethyl alcohol in water at temperatures of 25-50° C.  
Toplenergetika 11 no.6:59-63 Je '64. (MIRA 1c.1)

1. Vsesoyuznyy teploekhnicheskii institut.

PASTUKH, V.P. (deceased); VINNIKOVA, E.B.

Some characteristics in the distribution of thunderstorms on  
the African continent. Trudy GGO no.182:88-93 '65.  
(MIRA 18:9)

**Physical chemical analysis of colloidal systems. Antagonism of ions in the coagulation of hydrophobic sols.** A. V. Dumanovskii and E. I. Vinikova. *J. Phys. Chem.* (U. S. S. R.) 3, 133-5 (1934).—The method of triangular diagrams was used for the study of coagulation phenomena by salts or salt mixts.  $\text{As}_2\text{S}_3$  sols are better than  $\text{Fe}(\text{OH})_3$  sols for the study of antagonism, which is least shown in mixts. with univalent and bivalent cation salts. Mixts. of two univalent salts do not show antagonism, but rather reverse antagonism as for  $\text{LiCl}$  +  $\text{KCl}$ .  
F. H. Rathmann

F. H. Rathmann

ASME-ISA METALLURGICAL LITERATURE

**CLASSIFICATION**

MIKHAYLOV, Nikolay Nikolayevich; KOSENKO, Zinaida Vasil'yevna, doktor med.nauk;  
VINNIKOVA, G.E., red.; BESSONOVA, N.D., tekhn. red.

[The Americans; travel tales]Amerikantsy; putevaia povest'.  
2 izd. Moskva, Sovetskii pisatel', 1962. 237 p.  
(MIRA 16:2)

(United States--Social conditions)

MIKHAYLOV, Nikolay Nikolayevich; KOSENKO, Zinaida Vasil'yevna, doktor  
med.nauk; VINNIKOVA, G.E., red.; SOKOLOVA, R.Ya., tekhn.red.

[Americans; an account of a trip] Amerikantsy; putevaia  
povest'. Moskva, Sovetskii pisatel', 1960. 221 p. (MIRA 13:10)

(United States--Description and travel)

EYSNER, Aleksey Vladimirovich; VINNIKOVA, G.E., red.; KRYUCHKINA,  
L.P., tekhn. red.

[My sister Bulgaria; sketches] Sestra moia Bolgariia; ocherki.  
Moskva, Sovetskii pisatel', 1963. 213 p. (MIRA 16:9)  
(Bulgaria--Description and travel)

LENSKOY, Dmitriy Nikolayevich; VINNIKOVA, I.A., red.; ZENIN, V.V.,  
tekhn. red.

[Functions in non-Archimedean normed fields] Funktsii v  
nearkhimedovski normirovannykh poliakh. Saratov, Izd-vo  
Saratovskogo univ., 1962. 108 p. (MIRA 17:1)

SHEVCHIK, V.N.; SHVEDOV, G.N.; SOBOLEVA, A.V.; Prinimala uchastiye  
TRUBETSKOV, D.I., aspirant; VIINIKOVA, I.A., red.; ZENIN,  
V.V., tekhn. red.

[Oscillatory and wave effects in electron currents at super-  
high frequencies] Volnovye i kolebatel'nye yavleniia v elektron-  
nykh potokakh na sverkhvysokikh chastotakh. Saratov, Izd-vo  
Saratovskogo univ., 1962. 334 p. (MIRA 15:10)  
(Microwaves) (Electromagnetic waves) (Microwave tubes)



BILENKO, D.I.; DEMIDOV, V.K.; KOTELKOV, V.N.; NAZVANOV, V.F.;  
NOSOVA, V.A.; ORNATSKAYA, Z.I.; ROKAKH, A.G.; SVERDLOVA,  
A.M.; KAPSHAL', G.G.; KIR'YASHKINA, Z.I., dots., red.;  
VINNIKOVA, I.A., red.

[Textbook for practical studies on the physics of semiconductors]  
Rukovodstvo k prakticheskim zaniatiyam po fizike poluprovodnikov;  
uchebnoe posobie. [Saratov], Saratovskii univ., 1964. 115 p  
(MIRA 18:11)

KUZNETSOV, Pavel Savel'yevich; VINNIKOVA, I.A., red.; ZEMIN, V.V.,  
tekhn.red.

[The physicogeographical method] Metod fizicheskoi geogra-  
fii. Saratov, Izd-vo Saratovskogo univ. 1962. 58 p.  
(MIRA 17:1)

BURMISTROV, Yevgeniy Fedorovich; VINNIKOVA, I.A., red.; ZENIN, V.V.,  
tekhn. red.

[Symmetric deformation of structural orthotropic shells of  
revolution] Simmetrichnaya deformatsiya konstruktivno-  
ortotropnykh obolochek vrashcheniya. [n.p.] Izd-vo Saratovskogo  
univ., 1962. 107 p. (MIRA 16:6)  
(Elastic plates and shells—Tables, calculations, etc.)

FURSAYEV, A.D., zasl. deyatel' nauki RSFSR, doktor biol. nauk  
[deceased]; VORONINA, K.V.; VOLYNSKIY, B.G., kand. med.  
nauk; FREYDMAN, S.L.; BENDER, K.I.; KUZ'MINA, K.A.;  
MARTYNOV, L.A.; KUZNETSOVA, S.G.; VINNIKOVA, I.A., red.;  
ZENIN, V.V., tekhn. red.

[Medical plants and their utilization in medicine] Lekar-  
stvennyye rasteniia i ikh primeneniye v meditsine. [n.p.]  
Izd-vo Saratovskogo univ., 1962. 202 p. (MIRA 16:6)  
(BOTANY, MEDICAL)

VOLYNSKIY, B.G.; BENDER, K.I.; FREYDEAN, S.I.; VINNIKOVA, I.A.,  
red.

[Prescription manual; textbook for physicians and stu-  
dents] Retsepturnyi spravochnik; posobie dlia vrachei i  
studentov. Izd.2., dop. i perer. Saratov, Izd-vo Sara-  
tovskogo univ., 1964. 206 p. (MIRA 18:1)

VYSHEMIRSKIY, Vladislav Stanislavovich; VINNIKOVA, I A., red.

[Geological conditions governing the metamorphism of coals  
and oils] Geologicheskie usloviya metamorfizma uglei i nefti.  
Saratov, Izd-vo Saratovskogo univ., 1963. 376 p.  
(MIRA 18:4)

VINNIKOVA, M.A.

Evolution of the digestive system in anchovies. Pratsi Od. un.  
zbir. mol. vchen. un. 148 no.3:267-278 '58 (MIRA 13:3)

1. Nauchnyy rukovoditel' - prof. I.I. Puzanov.  
(Anchovies) (Alimentary canal)

L 12808-66 EWT(1)/EWA(j)/T/EWA(b)-2 JK

ACC NR: AP5028188

SOURCE CODE: UR/0248/65/000/008/0074/0082 37

AUTHOR: Prozorovskiy, S. V.; Vikhnovich, E. M.; Vinnikova, N. I.; Zubets, N. A. E

ORG: Institute of Epidemiology and Microbiology im. N. F. Gamalei, AMN SSSR (Institut epidemiologii i mikrobiologii AMN SSSR); Institute of Virology im. D. I. Ivanovskiy, AMN SSSR, Moscow (Institut virusologii AMN SSSR)

TITLE: Biology of L-forms of bacteria and mycoplasmas, causative agents of diseases of the respiratory organs and upper respiratory tract

SOURCE: AMN SSSR. Vestnik, no. 8, 1965, 74-82

TOPIC TAGS: bacteria, mycoplasma, infective disease, microbiology 45

ABSTRACT: Study of various representatives of *Mycoplasmataceae* - *M. gallinarum*, *M. gallisepticum*, *M. inneri*, *Murimices pulmonis*, *Musculomices pulmonis*, *M. hyorhinis*, *M. mycoides*, *M. pneumoniae*, *M. salivarium*, and *M. orale* - showed them to be pneumotropic, aerobic (except *M. salivarium* and *M. orale*), similar in enzymatic activity, in need of horse or rabbit serum in the medium to ensure growth, and capable of causing  $\alpha$ - or  $\beta$ -hemolysis of equine erythrocytes. These agents are serologically

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UDC: 576.8.095.5.06 : 616.2



L 12808-66

ACC NR: AP5028188

specific. A comparison of *M. pneumoniae* and other mycoplasmas revealed that the morphology and microstructure of *M. pneumoniae* colonies are typical of most mycoplasmas. In view of the close relationship between mycoplasmas and bacterial forms and the reversion of some strains of mycoplasmas into bacteria, the authors conclude that some species of mycoplasmas can be regarded as L-form bacteria. They suggest that in the light of this phenomenon research should be directed to elucidation of the possible role of L-form bacteria and mycoplasmas in the pathogenesis of some acute and chronic diseases of the respiratory organs and upper respiratory tract. Orig. art. has: 5 figures, 2 tables.

SUB CODE: 06/ SUBM DATE: 02Jun65/ ORIG REF: 024/ OTH REF: 000

jw  
Card 2/2

PROZOROVSKIY, S.V.; LEVINA, G.A.; BLINOVA, S.V.; VINNIKOVA, N.I.

Some physiological characteristics of L-form bacteria of various  
types and Mycoplasma as possible sources of their differentiation.  
Vest. AMN SSSR 20 no.8:23-29 '65. (MIRA 18:9)

1. Institut epidemiologii i mikrobiologii imeni N.F.Gamalei  
AMN SSSR, Moskva.

KEL'TSEV, V.V.; VINNIKOVA, N.I.

Investigating the catalytic dehydrogenation of propane with the  
introduction of additional hydrogen into the reaction zone. Gaz.  
prom. 4 no.5:36-41 My '59. (MIRA 12:7)  
(Propane) (Catalysis)

YERMOLAYEV, I.I., aspirant.; GUBAYDULINA, Ye.Ya., ordinatory; VINNIKOVA, N.I.,  
ordinator.

Some negative aspects of the use of antibiotics in stomatological  
surgery. Stomatologiya 38 no.1:29-34 Ja-F '59. (MIRA 12:3)

1. Iz kafedry khirurgicheskoy stomatologii (zav. - prof. A.I.  
Yevdokimov) Moskovskogo meditsinskogo stomatologicheskogo instituta  
(dir. - dots. G.N. Beletskiy)  
(ANTIBIOTICS) (STOMATOLOGY)

KEL'TSEV, V.V.; VINNIKOVA, N.I.

Catalytic dehydrogenation of propane and ethane. Trudy VNIIGAZ  
no.12:187-194 '61. (MIRA 15:1)  
(Propane) (Ethanes) (Dehydrogenation)

KEL'TSEN', V.V.; VIRNIKOVA, N.I.; BUKHOL'TSEVA, G.V.

Investigating the thermal decomposition of methane on the surface  
of iron ore. Gaz. prom. 8 no.4:4-49 '63. (MIRA 17:10)

*CA*

Chemical equilibria of reactions between hydrocarbons.  
V. constants of equilibrium of the reactions:  $C_6H_6 + C_6H_6 \rightleftharpoons C_{12}H_{10}$ ,  $C_6H_6 + C_6H_6 \rightleftharpoons C_{12}H_{14}$ ,  $C_6H_6 + C_6H_6 \rightleftharpoons C_{12}H_{18}$ ,  $C_6H_6 + C_6H_6 \rightleftharpoons C_{12}H_{22}$ , A. A. Vrdenskiy, *Sov. Chem.* (U.S.S.R.) 3, 719-23 (1963); cf. C. A. J. Chem. (U.S.S.R.) 3, 719-23 (1963).  
27, 1959.—The constants of the equilibria of the reactions of hydrogenation of PhMe, PhEt and PhPr were detd. in the presence of Pd catalysts. The data agree with the following equations:  $\log K = -10870/T + 2.237$  for PhMe;  $\log K = -10870/T + 2.237$  for PhEt;  $\log K = -10870/T + 2.237$  for PhPr. Under similar conditions PhMe is hydrogenated more thoroughly than PhEt; PhEt and PhPr are hydrogenated equally thoroughly but less so than PhMe and PhAc.

Chas. Blanc

2

Chemical equilibria of reactions between hydrocarbons  
 VI. Equilibrium constants for the reaction  $C_3H_8 + H_2 \rightleftharpoons C_3H_6 + 2H_2$ . A. A. Vvedenskii and S. G. Vinnitskaya. *J. Gen. Chem.* (U. S. S. R.) 4, 120-3 (1934); cf. C. A. 28, 2508.  
 Equil. const. for the above reaction were measured at 510-12° on Pd catalyst and at 500° on  $Cr_2O_3$ . An equation was formulated giving the variation of  $\log K_p$  with temp. and was confirmed experimentally. VII. A. V. Prost. *Ibid.* 124-31.—From spectroscopic information equil. const. for the reaction  $C_3H_8 + H_2 \rightleftharpoons C_3H_6 + 2H_2$  and the heat capacity were calcd., as well as the entropy and the potentials for  $C_3H_8$  and  $C_3H_6$ . Exptl. data confirm the calcs. The most probable torsional frequency for  $C_3H_8$  is  $980\text{ cm}^{-1}$ , and in the mols. of  $C_3H_8$  free rotation of the Me groups around the C-C axis is taking place at temps. above 300°K. I. G. Tolpin

ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION



CO

30

Regeneration of the catalyst for transforming ethyl alcohol into butadiene. S. G. Vinnikova. *Sib. s. Kazansk 1936, No. 3, 40. A discussion. A. Pestoff*

ASR 54.4 METALLURGICAL LITERATURE CLASSIFICATION

BC

Equilibrium between hydrocarbons. VI. A. A. Vannikov and S. G. Vinnikova. *Vysk. Khim.* (A. V. Zhurav (J. Gen. Chem. Russ. 1964, 3, 188-191).—  
VI. The equilibrium constants  $K_p$  of the reaction  $C_2H_6$  have been determined at 100°C (catalyst), and at 200°C ( $Cr_2O_3$  catalyst). 1100 cal. 12.0 H 100-12.11  
VII. The  $\Delta G^\circ$  (entropy, cal/mol) of formation of  $C_2H_6$  and  $C_2H_4$  calc. from spectroscopic data are in good agreement with the experimental val. R. T.

45H-11A METALLURGICAL LITERATURE CLASSIFICATION

[illegible]

2

CA

Chemical equilibria of reactions between hydrogenated  
V. Constants of equilibria of the reactions:  $C_2H_5CH_3 + H_2 \rightleftharpoons C_2H_5CH_2CH_3$ ;  $n-C_4H_{10} \rightleftharpoons C_4H_9CH_3$ ;  $C_4H_9CH_3 + H_2 \rightleftharpoons n-C_5H_{12}$ ; A. A. Vvedenskiy, *Chem. Abstr.* 52:10000 (1954); S. G. Vasilkova, V. R. Zharkova and S. M. Prudnikov, *J. Gen. Chem. (U. S. S. R.)* 3, 718-22 (1953); cf. C. A. J. 27, 2359. —The constants of the equilibria of the reactions of hydrogenation of PhMe, PhEt and PhPr were detd. within 200-300° in the presence of Pd catalysts. The data agree with the following equations:  $\log K_p = 10970/T - 20.227 \pm 0.083$  for PhMe +  $3H_2 \rightleftharpoons C_6H_5CH_3$ ;  $\log K_p = 9920/T - 18.041 \pm 0.048$  or  $\log K_p = 10,970/T - 20.227 \pm 0.083$  for PhEt +  $3H_2 \rightleftharpoons C_6H_5CH_2CH_3$ ;  $\log K_p = 9875/T - 18.560 \pm 0.084$  or  $\log K_p = 10,970/T - 20.227 \pm 0.105$  for PhPr +  $3H_2 \rightleftharpoons C_6H_5CH_2CH_2CH_3$ . Under similar conditions PhMe is hydrogenated more thoroughly than C<sub>6</sub>H<sub>5</sub>; PhEt and PhPr are hydrogenated equally thoroughly but less so than C<sub>6</sub>H<sub>5</sub> and PhMe. Chas. Rezac /

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

L 22479-66 EWT(m)/T DJ  
ACC NR: AP6007939 (A)

SOURCE CODE: UR/0318/66/000/001/0020/0022

AUTHOR: Bronfin, I. B.; Sidorskaya, L. F.; Slepchenko, L. G.; Vinnikova, R. A.; Kurach, L. S.

ORG: Omsk Oil Refinery (Omskiy neftepererabatyvayushchiy zavod)

TITLE: Synthesis of alkylphenols for oil additive manufacturing using silica-alumina catalysts

SOURCE: Neftepererabotka i neftekhimiya, no. 1, 1966, 20-22

TOPIC TAGS: alkylphenol, petroleum product, lubrication oil, lubricant, lubricant property, lubricant additive

ABSTRACT: Catalytic synthesis of alkylphenols based on technical grade phenol fraction and olefin fraction boiled below 80°C was investigated. The synthesis was conducted by passing a mixture of 27-28 wt % phenol fraction and 72-73 wt % olefin fraction through a tubular reactor packed with silica-alumina cracking catalyst. At an optimum reaction temperature equal to 150°C, the yield of alkylphenols was 25-30 wt % per pass. The lubricating oil additive based on the product alkylphenol was found to conform to the GOST standard for quality. Alkylphenol characteristics reaction temperature is graphed. Orig. art. has: 4 figures.

SUB CODE: 07, 11 SUBM DATE: 00/ ORIG REF: 008/ OTH REF: 002

Card 1/1 BK UDC: 665.652.4-4 : 665.4-4 : 66.022.313

GULYAYEV, R.A.; VINNIKOVA, T.L.

Use of an electronic computer in calculating the relative population  
of atomic energy levels. Astron. zhur. 42 no.3:509-514 My-Je '65.  
(MIRA 18:5)

1. Institut zemnogo magnetizma, ionosfery i rasprostraneniya  
radiovoln AN SSSR.

ACCESSION NR: AP5015579

PO-4/Ps-5/P2-4/Pae-2/Peb/Pi-4 G4  
UR/0033/65/042/003/0509/0514  
523.775

AUTHORS: Gulyayev, R. A.; Vinnikova, T. L.

TITLE: Determination of relative populations of energy levels in atoms by means of electronic computers

SOURCE: Astronomicheskii zhurnal, v. 42, no. 3, 1965, 509-514

TOPIC TAGS: electronic computer, energy level, electron density, statistical function / Ural 2 computer

ABSTRACT: The authors have set up a program for computing relative populations of energy levels in atoms by using a Ural-2 computer. Equations are transformed for probabilities of excitation potentials and statistical weights of levels, of oscillator strengths, of kinetic temperature and electron concentration of a medium, of radiation temperature or radiation intensity in appropriate wavelengths, and of the radiation dilution factor, making them suitable and convenient for practical computer operation. As an example of the operation, the authors computed the relative populations of eight lower levels of orthohelium in photospheric radiation. Computations were made for a series of values of electron density from

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ACCESSION NR: AP5015579

$10^6$  to  $10^{17}$  and for kinetic temperatures from  $10^4$  to  $3 \cdot 10^5$ . For wavelengths greater than  $4000 \text{ \AA}$  the radiation temperature was taken as  $6000^\circ\text{C}$ . For shorter wavelengths the value from Allen for photospheric radiation was used. The dilution factor was considered to be one half. It was found that at population densities below  $10^{12}$  the relative population of levels in orthohelium does not depend on either electron concentration or on kinetic temperature, but is determined exclusively by the field of photospheric radiation. The effect of electron impact becomes substantial at concentrations above  $10^{12}$ . Computations for higher values of concentration agree with results of computing by the Boltzmann formula. Orig. art. has: 14 formulas and 1 table.

ASSOCIATION: Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln AN SSSR (Institute of Earth Magnetism, the Ionosphere, and the Propagation of Radio Waves, AN SSSR)

SUBMITTED: 21Oct64

ENCL: 00

SUB CODE: NF, DP

NO REF SOV: 004

OTHER: 005

Co-a 2/2



SHAPIRO, B.S.; VINNIKOVA, T.L.

Programming the computation of virtual ionospheric altitudes by  
an electronic digital computer. Geomag. i aer. 3 no.2:269-  
276 Mr-Ap '63. (MIRA 17:2)

1. Institut zemnogo magnetizma, ionosfery i rasprostraneniya  
radiovoln AN SSSR.

S/203/63/003/002/010/027  
D207/D307

AUTHORS: Shapiro, B.S. and Vinnikova, T.L.

TITLE: Programming of calculations of the true heights of the ionosphere on an electronic computer

PERIODICAL: Geomagnetizm i aeronomiya, v. 3, no. 2, 1963, 269-276

TEXT: Investigations of the vertical distribution of the ionization with the height  $h$  in the ionosphere below the maximum of the F2 layer require labor-consuming calculations. Electronic computers are used to ease these calculations. A program of calculations of the true heights of the ionosphere, suitable for the Strela computer, has been described by B.S. Shapiro (Sbornik 'Issledovaniya ionosfery' (Collection 'Investigations of the Ionosphere') no. 5, Izd. AN SSSR, 1962, 121). The present paper gives the formulas and the program for the calculation and subsequent analysis of the true heights, suitable for the BESM-2 (BESM-2) computer. BESM-2 deals simultaneously with 16  $h(f)$  curves, where  $f$  is the frequency, with a

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S/203/63/003/002/010/027  
D207/D307

Programming of calculations ...

maximum of 75 ordinates for each curve: in the case of Strela 8 curves are dealt with (a maximum of 100 ordinates for each curve). The average time for dealing with each  $h(f)$  curve by BESM-2 is about 15 sec, compared with 30 sec in the case of Strela.

ASSOCIATION: Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln AN SSSR (Institute for Terrestrial Magnetism, Ionosphere and Radiowave Propagation, AS USSR)

SUBMITTED: August 14, 1962

Card 2/2

L 9979-65

ENT(1)/FOG/EEC(t)

PO-4/PI-4

ASD(a)-5/ESD/ESD(t)

CH

S/0203/64/004/005/0917/0923

ACCESSION NR: AP4046289

AUTHOR: Ben'kova, N. P.; Vinnikova, T. L.; Tyurmina, L. O.

TITLE: Geomagnetic eccentric dipole

SOURCE: Geomagnetizm i aeronomiya, v. 4, no. 5, 1964, 917-923

TOPIC TAGS: geomagnetism, geomagnetic dipole, terrestrial eccentric dipole, geomagnetic field

ABSTRACT: In an earlier article it was pointed out that even a qualitative study of magnetic maps for the earth's surface and for great heights (up to 15,000 km) shows that the geomagnetic field is approximated by an eccentric dipole better than by a central dipole. In this new study the coefficients of spherical harmonic analysis for world magnetic maps for the epoch 1955 have been used to compute the parameters of the eccentric dipole. Despite the small value (~1%) of the outer part of the field, all computations have been made using coefficients representing the inner part of the geomagnetic field. There is a full presentation of the computations of the parameters of the eccentric dipole and the point of intersection of its axis with the earth's surface. The results agree well with those obtained by other authors. Simple formulas are derived for computation of the field of the eccentric dipole. A "Ural-2" electronic computer was used to compute the values

L 9979-65

ACCESSION NR: AP4046289

X, Y, Z, H and T for the eccentric dipole field at heights of 0, 50, 300, 400, 1,000, 2,000, 3,000, 10,000 and 15,000 km from the earth's surface. Figures 1a and 2a of the Enclosure show the residual field of the central dipole; Figures 1b and 2b of the Enclosure show the residual field of the eccentric dipole. The iso-lines give the distribution of the Z-component (solid lines are positive values, dashed lines are negative values); for  $h = 0$  km the figures denote hundreds of gammas; for  $h = 15,000$  km the figures denote gammas; the arrows indicate the magnitude and direction of the horizontal component. The authors present an analysis of these maps. The maps and tabulated data indicate that at the earth's surface the residual field of a central dipole is generally greater than the residual field of an eccentric dipole by a factor of 1.2-1.3. At greater heights the difference between the residual fields is greater. It is concluded that the residual field of the eccentric dipole attenuates with height more rapidly; this appears to confirm that it is such a field, rather than that of a central dipole, which better corresponds to the physical nature of the main part of the geomagnetic field. Orig. art. has: 14 formulas, 3 figures and 3 tables.

ASSOCIATION: Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln AN SSSR (Institute of Terrestrial Magnetism, the Ionosphere and Radio Wave Propagation, AN SSSR)

Card 2/7

L 9979-65

ACCESSION NR: AP4046289

SUBMITTED: 16Apr64

ENCL: 04

SUB CODE: ES

NO REF SOV: 004

OTHER: 004

Card 3/7

68

ACCESSION NR: AP4035689

S/0057/64/034/005/0818/0820

AUTHOR: Vinnikova, T.L.; Gintsburg, M.A.

TITLE: Spectrum of the surface waves at the boundary between the vacuum and a magnetized plasma

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.5, 1964, 818-820

TOPIC TAGS: plasma, surface wave, plasma physics, plasma wave dispersion

ABSTRACT: The dispersion equation for surface waves at the plane boundary between the vacuum and a plasma in a uniform magnetic field parallel to the boundary was solved numerically for various values of the parameters, and some of the results are presented in graphical and tabular form. Only solutions for waves propagating transversely to the magnetic field are discussed. The dispersion equation was derived earlier (M.A.Gintsburg, Tr. Inst. zemnogo magnetizma, ionosfery\* i rasprostraneniya voln AN SSSR, No.17, p.208, 1960) and it is valid only for a sharp boundary, for which the electron Larmor radius is less than the penetration depth of the wave into the vacuum. The limiting frequencies for which this condition is satisfied are tabulated for several values of the thermal velocity and magnetic field. The phase velocity

Card 1/2

ACCESSION NR: AP4035689

decreases monotonically with increasing frequency, and at a limiting frequency, depending on the magnetic field and the direction of propagation, the phase velocity vanishes and propagation ceases. The impedance of the direct wave changes sign at a frequency slightly below the limiting value, and at higher frequencies the energy flux is in the direction opposite to that of propagation. The phase velocities are shown graphically as functions of frequency for several values of the magnetic field, and the frequency intervals within which only one wave propagates are tabulated. At low frequencies the wave penetrates deeply into the vacuum but not into the plasma. With increasing frequency the vacuum penetration depth decreases and the plasma penetration depth increases, until these two quantities become equal at the limiting frequency for vanishing phase velocity. Although surface waves can propagate in the absence of a magnetic field, the presence of the field increases the frequency range within which these waves can exist. Orig.art.has: 6 formulas, 2 figures and 2 tables

ASSOCIATION: none

SUBMITTED: 10Jun63

DATE ACQ: 20May64

ENCL: 00

SUB CODE: MK

NR REF SOV: 006

OTHER: 000

Card 2/2



SOURCE CODE: UR/0203/66/006/005/0956/0956

ACC NRI AP7006021

AUTHOR: Vinnikova, T. L.; Tsivtsivadze, M. M.; Cherevko, T. N.

ORG: Institute of Terrestrial Magnetism, the Ionosphere and Radio Wave Propagation, AN SSSR (Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln AN SSSR)

TITLE: Programs for computing the geomagnetic field by the spherical analysis method

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 5, 1966, 956

TOPIC TAGS: geomagnetic field, electronic computer / Ural-2 electronic computer

ABSTRACT: The accumulation of much experimental data on the geomagnetic field makes necessary the use of electronic computers for its analysis. This brief paper describes a group of programs which has been developed for use with a "Ural-2" computer for computing the geomagnetic field by the spherical analysis method. Using the programs for different heights  $h$  above the earth it is possible to compute the total vector  $T$  of the magnetic field and its components  $X$ ,  $Y$ ,  $Z$ , the vertical gradients  $\partial T/\partial r$ ,  $\partial X/\partial r$ ,  $\partial Y/\partial r$ ,  $\partial Z/\partial r$ , and also the difference  $\Delta T = T_{\text{obs}} - T_{\text{com}}$  ( $T_{\text{obs}}$  is the total vector of the observed field,  $T_{\text{com}}$  — the computed field) for projection of the observed field onto a sphere of stipulated radius. The authors thank N. P. Ben'kovaya and L. O. Tyurminaya for setting up the problem and for constant attention. Orig. art. has: 1 formula. [JPRS: 38,937]

SUB CODE: 08, 09 / SUBM DATE: 18Jan66 / ORIG REF: 002 / OTH REF: 001

Card 1/1

UDC: 550.383

042 70803

USSR/Weeds and Weed Control

N

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 44439

Author : Chernenko Ye.G., Pustovit L.V., Vinnikova T.T., Garayeva A.A.

Inst : Stavropol Agricultural Institute

Title : The Number and Botanical Composition of Weeds Which Choke  
up the Land Used in Crop Rotation by Brigad, No 3, Stalin  
Kolkhoz in the City of Stavropol'.

Orig Pub : Sb. nauchno-issled. rabot stud. Stavropol'sk. s.-kh. in-t,  
1956, vyp. 4, 56-58

Abstract : No abstract

Card : 1/1

VINNIKOVA, Ye. Ya., Cand Med Sci -- (diss) "Ciliary neurotomy with diathermocoagulations of the sclerae as a method of eliminating pain in absolute glaucoma." Kuybyshev, 1960. 18 pp; (Kuybyshev Medical Inst, Chair of Eye Diseases); 270 copies; price not given; (KL, 30-60, 140)

VINNIKOVA, Ye.Ya.

Late results of ciliarotomy in absolutely painful glaucoma. Oft.  
shur. 15 no.5:274-278 '60. (MIRA 13:9)

1. Iz kafedry glaznykh bolezney (zav. - prof. T.I. Yeroshevskiy)  
Kuybyshevskogo meditsinskogo instituta.  
(CILIARY BODY—SURGERY) (GLAUCOMA)

YEROSHNEVSKIY, T.I., prof.; STUKALOV, S.Ye., aspirant; GUR'YANOVA, N.A.,  
ordinator; VINNIKOVA, Ya.Ya., ordinator

Use of tissue therapy in certain eye diseases. Oft.zhur. 13  
no.8:482-486 '58. (MIRA 12:2)

(TISSUE EXTRACTS)  
(EYE--DISEASES AND DEFECTS)

VINNIKOVSKIY, S.A.

Geology and the oil potential of the northern part of the Perm-Bashkir  
arch. Trudy VNIGNI no.30:251-256 '61. (MIRA 14:9)  
(Perm Province--Petroleum geology)

ABRIKOSOV, I.Kh.; VINNIKOVSKIY, S.A.

Development of the Yarino-Kamenny Log oil field. Geol.  
nefti i gaza 7 no.10:9-13 U '63. (MIRA 17:10)

1. Ob'yedineniye Permneft'.

ROZENFEL'D, Y.I.; POPOVA, I.A.; VINITSKAYA, A.I.

Acid and neutral  $\gamma$ -amylases of the liver. Dokl. AN SSSR 163  
no.6:1507-1509 Ag '65. (MIRA 18:8)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR. Submitted  
November 12, 1964.



VINNITSKAYA, M.G.; IVANOVA, M.A.

Ideological indoctrination of professors and teaching personnel at the  
Moscow Pharmaceutical Institute. Apt. doc no. 4-3-8 JI-ag '53. (MLR 6:8)  
(Communist education)

BONGARD, S.A.; VINITSKAYA, M.I.

Effect of light absorption by the matrix film on the gradation  
of the washed off relief. Usp. nauch. fot. 8:92-96 '62.  
(MIRA 17:7)

VIMNITSKAYA, P.I. (Kursk)

Interfactory planning and annual plan for equipment, production  
and finance at the Kursk Facotry No.2. Shvein.prom. no.2:7-9  
Mr-Ap '60. (MIRA 13:11)

(Kursk--Clothing industry--Management)

VINNITSKAYA, R.S.; POLYANSKAYA, L.G.

Saturation of the blood with oxygen during physical strain in patients with congenital heart defects. Grud.khir. no.3:36-41 '61. (MIRA 14:9)

1. Iz laboratorii fiziologii (zav. - prof. L.L. Shik) Instituta khirurgii imeni A.V. Vishnevskogo (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Vishnevskiy) AMN SSSR.  
(HEART—ABNORMALITIES AND DEFORMITIES) (BLOOD—OXYGEN CONTENT)  
(STRESS (PHYSIOLOGY))

VINNITSKAYA, R.S.; SERGEYEVA, K.A.

Changes in hemodynamics and external respiration in patients with multiple valvular defects of the heart. Grud. khir, 6 no.2:62:66 (MIRA 18:4)  
Mr-Apr '64.

1. Fiziologicheskaya laboratoriya (zav. - prof. L.L.Shik) Instituta khirurgii imeni Vishnevskogo (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A.Vishnevskiy) AMN SSSR, Moskva. Adres avtorov: Moskva, B. Serpukhovskaya ul., d.27, Institut khirurgii imeni Vishnevskogo.

VINNITSKAYA, V.K. [Vinnyts'ka, V.K.], kand.med.nauk

Treating late toxemias of pregnancy with hypotensives; preliminary  
report. Ped., akush. i gin. 19 no.6:59-61 '57. (MIRA 13:1)

1. Akusherskoye otdeleniye (zav. - doktor med.nauk S.P. Vinogradova)  
Ukrainskogo nauchno-issledovatel'skogo instituta okhrany materinstva i  
detstva im. Geroya Sovetskogo Soyusa prof. P.M. Buyko (nauchnyy ruko-  
voditel' - deystvitel'nyy chlen AMN SSSR prof. A.P. Nikolayev, dir. -  
zasluzh. vrach USSR M.D. Burova).  
(PREGNANCY, COMPLICATIONS OF) (VASOMOTOR DRUGS)

VINNITSKAYA, V.K.

Epithelial inclusions in the lymph nodes of patients with  
cancer of the cervix uteri. Vop. onk. 11 no.12:34-40 '65.  
(MIRA 19:1)

1. Ukra'nskiy nauchno-issledovatel'skiy institut eksperimental'noy  
i klinicheskoy onkologii (dir. - akademik AN UkrSSR prof. R.Ye.  
Kavetskiy) i kafedra akus'sarstva i ginekologii (zav. - prof. V.N.  
Savitskiy) Kiyovskogo instituta usovershenstvovaniya vrachey  
(konsul'tant - prof. V.L. Byalik).

VIMLITSKIYA, Ye.P., inst.

One hundredth anniversary of the Leningrad "Severnoye siyaniye"  
Perfume Factory. Izsl.-zhir. prom. 27 no. 2:1-2 '61.

(MLD 14:2)

1. Leningradskaya fabrika "Severnoye siyaniye."  
(Leningrad--Cosmetics industry) (Perfumes)



AKATOV, K.K.; VINNITSKAYA, Ye.P., inzh.; BLINER, L.G., inzh.; ASKINAZI, Z.M., inzh.

Refining hide fat. Masl.-zhir.prom. 25 no.1:36-38 '59.  
(MIRA 12:1)

1. Nevskiy mylovarennyy zavod (for Akatov). 2. Leningradskiy  
zavod "Salolin" (for Vinnitskaya, Bliner, Askinazi).  
(Oils and fats)

VINNITSKIY, A.A.

Methods of determining friction forces during rolling. Trudy Inst.  
mat. i obog. AN Kazakh. SSR 7:112-121 '63. (MIRA 17:6)

VINNITSKIY, A.A.; SVIDENKO, V.N.

Effect of the elastic deformation of dies on the forming of a deformation center and on the indications of a sectional gauge for the measurement of friction forces. Trudy Inst. met. i obog. AN Kazakh. SSR 10:91-98 '64.  
(MIRA 18:7)

SOV/32-25-4-48/71

25(2)

AUTHORS:

Presnyakov, A. A., Vinnitskiy, A. A.

TITLE:

Device With a Two-part Bolt for Determining the Coefficient of Outside Friction (Pribor s razreznym boykom dlya opredeleniya koeffitsiyenta vneshnego treniya)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 4, p 487 (USSR)

ABSTRACT:

A device was designed (Figure) which makes it possible to determine the contact frictional forces acting in the immersion, as well as the true specific pressure on the contact surface. The latter permits the distribution of friction in the place of deformation to be studied, and the frictional coefficient to be computed. The lower bolt of the device consists of two halves - one stable and the other movable. The pressure exerted on the bolt by an immersion is transmitted from the movable half by a screw to a dynamometer, and so the force is recorded. To determine the true specific pressure, a second dynamometer with angle feelers (ugol'nyy datchik) of the system by G. I. Aleksandrov (Ref 1, according to instructions I15-54 on the measurement with angle feelers of the system by the TsNIITMASH) is used. The latter contains a membrane dynamometer

Card 1/2

SOV/32-25-4-48/7:

Device With a Two-part Bolt for Determining the Coefficient of Outside Friction

on which the load acts by a pin. Preliminary tests showed that the friction coefficient is about 0.1 for copper alloys at room temperature. There are 1 figure and 1 Soviet reference.

ASSOCIATION: Institut yadernoy fiziki Akademii nauk Kazakhskoy SSR (Institute of Nuclear Physics of the Academy of Sciences of the Kazakhskaya SSR)

Card 2/2

VINNITSKIY, A.A.; PRESNYAKOV, A.A.

Experimental determination of friction coefficients during  
upsetting. Zav.lab. 26 no.12:1405 '60. (MIRA 13:12)

1. Institut yadernoy fiziki AN Kazakhskoy SSR.  
(Deformations (Mechanics)) (Friction)

VINNITSKIY, A A

PHASE I BOOK EXPLOITATION

507/5690

23

Akademiya nauk Kazakhskoy SSR. Institut yadernoy fiziki.

Metallovedeniye i obrabotka metallov davleniyem (Physical Metallurgy and Pressworking of Metals) Alma-Ata, 1961. 183 p. (Series: Trudy Instituta yadernoy fiziki, t. 4) 2,450 copies printed.

Resp. Eds.: I. G. Griman and A. A. Presnyakov; Resp. Secretary: V. V. Chervyakova;  
Eds.: M. Ya. Brailovskaya and T. I. Shevchuk; Tech. Ed.: Z. P. Rorokina.

PURPOSE: This book is intended for scientific research workers, technical personnel in industry, and students and aspirants interested in problems of physical metallurgy and the pressworking of metals.

COVERAGE: The book, Volume IV of the Transactions of the Institute of Nuclear Physics, Academy of Sciences Kazakh SSR, contains papers reviewing problems of physical metallurgy. Attention is given to a consideration of metal ductility, strength, phase transformation, and the ordering of various alloys, and to a discussion of the diffusion mechanism of the plasticity. Experimental findings concerning strength, deformation, and external friction in the working of non-ferrous metals and alloys are included in papers dealing with metal rolling.

Card 1/6

Physical Metallurgy and Processing of Metals

501/559

Problems of automatic inspection and control of multidraft wire-drawing frames are also considered. Most of the papers are accompanied by references, the majority of which are Soviet.

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Physical Metallurgy and Pressworking of Metals

507/5000

2.3

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Physical Metallurgy and Pressworking of Metals

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3

507/5090

Physical Metallurgy and Preswearing of Metals

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13

Physical Metallurgy and Pressworking of Metals

077/5590

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Grimman, I. G., and L. S. Mikhaylova. On the Automatic Measuring of the Wire Velocity and Footage During Drawing

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Melakhov, Yu. I., Study of the Automatic Electronic Drive of a Wire-Drawing Frame

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Grimman, I. G., and N. I. Sakhipov. On the Automatic Electric-Simulator Control of Wire-Drawing Frames

172

AVAILABLE: Library of Congress

Card 6/6

Vik/wrc/lms  
11-22-61

S/03... /026/012/023/036  
B026/0006

1.9600

also 2807

AUTHORS:

Vinnitskiy, A. A. and Presnyakov, A. A.

TITLE:

The Experimental Determination of the Coefficient of Friction in Shrinking

PERIODICAL:

Zavodskaya laboratoriya, 1960, Vol. 26, No. 12, p. 1405

TEXT: Already previously, the authors (Ref. 1) suggested determining the coefficient of friction by means of a "cutting hammer", which permits studying the change of friction in deforming in various regions of deformation, which is not possible in the case of other methods. For comparison, the coefficients of friction were determined according to the shift method (Ref. 2). The shifting force was recorded by the resistance pickup using an oscilloscope of the type МП0-2 (MPO-2). The oscilloscope showed a maximum on the curve, which corresponds to the instant at which the adhesive friction is overcome. Thus, already the first experiments prove that gliding and adhesion differ. The results of the experiments made to determine the coefficient of external friction are shown in a figure. The rules governing the change in the coefficient of friction, measured by means of both types

Card 1/2

87709

The Experimental Determination of the Coefficient of Friction in Shrinking S/032/60/026/012/023/036  
B020/B056

of apparatus, are practically the same. The coefficients of friction are near 0.5 at a degree of deformation below 10%, and drop rapidly if the shift method is applied, and less rapidly when using the "cutting hammer" method. With equal degrees of deformation, the coefficients of friction of both alloys are practically the same. If the degree of deformation is increased, the values of the coefficients of friction decrease, and converge to a value somewhat below 0.1. There are 1 figure and 2 Soviet references.

ASSOCIATION: Institut yadernoy fiziki Akademii nauk Kazakhskoy SSR  
(Institute of Nuclear Physics of the Academy of Sciences  
Kazakhskaya SSR)

Card 2/2

S/137/52/000/004/061/201  
A052/A101

AUTHORS: Presnyakov, A. A., Vinnitskiy, A. A.

TITLE: On the method of determining the coefficient of external friction  
by means of conical strikers

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 4, abstract 4D17  
(Tr. In-ta yadern. fiz. AN KazSSR, no. 4, 1961, 97 - 99)

TEXT: The method of determining the coefficient of external friction by  
means of conical strikers is discussed. The uniformity of deformation of cylin-  
dric samples by conical strikers is secured by counterbalancing the effect of a  
number of factors acting in different directions in the process of deformation.  
On the basis of the fact that the samples preserve their cylindricity, one can  
not judge on the value of the coefficient of external friction. The method of  
conical strikers is fundamentally a faulty one.

K. Ursova

[Abstracter's note: Complete translation]

Card 1/1

PRESNYAKOV, A.A.; VINNITSKIY, A.A.

Theory of a split roller intended for measuring friction forces during rolling. Izv. vys. ucheb. zav.; Chern. met. 6 no.3: 113-116 '63. (MIRA 16:5)

1. Institut yadernoy fiziki AN KazSSR.  
(Rolling (Metalwork)) (Friction—Measurement)



VINNITSKIY, A.A.; PRESNYAKOV, A.A.

Limiting angles of grip in rolling. Izv. AN Kazakh. SSR. Ser. ret.,  
obog. i ogneup. no.3:91-94 '61. (MIRA 15:1)  
(Rolling (Metalwork))

S/137/62/060/004/060/201  
A052/A101

1.1300

AUTHORS: Presnyakov, A. A., Vinnitskiy, A. A.

TITLE: Method of determining specific frictional forces at rolling

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 4, abstract 4D16  
(Tr. In-ta yadern. fiz. AN KazSSR, no. 4, 1961, 100 - 101)

TEXT: The process of plastic deformation at rolling is greatly influenced by the external friction between the deformed metal and the rolls. A device (a slitted roll) is designed to study the frictional forces in the seat of deformation in the process of rolling. The scheme of the device and its mode of operation are presented. Simultaneously with the measurement of frictional forces, the change of the true specific pressure is measured by means of a special device the roll of which has a built-in dynamometer with carbon pickups. The total pressure of metal on rolls is measured with dynamometers installed under pressing screws of the rolling mill. On differentiating the curve obtained on the device, the curve for distribution of specific frictional forces over the grip hold arc is found. Having the curve for distribution of specific pressures it is possible

Card 1/2

Method of determining...

S/137/62/000/004/050/201  
A052/A101

to obtain a diagram of distribution of coefficients of friction in the seat of deformation in the process of rolling.

K. Ursova

[Abstracter's note: Complete translation]

Card 2/2

VINNITSKIY, A.A.; PRESNYAKOV, A.A.

Potentialities of friction forces in rolling. Trudy Inst. iad. fiz.  
AN Kazakh.SSR 4:102-106 '61. (MIRA 14:8)  
(Rolling (Metalwork)) (Friction)

PRESNYAKOV, A.A.; VINNITSKIY, A.A.

Method of determining the coefficient of external friction by  
means of conical strikers. Trudy Inst.iad.fiz.AN Kazakh.SSR  
4:97-99 '61. (MIRA 14:8)  
(Friction--Testing)

PRESNYAKOV, A.A.; VINNITSKIY, A.A.

Method of determining specific friction forces in rolling. Trudy  
Inst.iad.fiz.AN Kazakh.SSR 4:100-101 '61. (MIRA 14:8)  
(Rolling (Metalwork)) (Friction--Testing)

S/137/62/000/003/145/191  
A052/A101

AUTHORS: Vinnitskiy, A. A., Presnyakov, A. A.

TITLE: The experimental determination of the coefficient of friction at swaging.

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 75, abstract 3I483  
("Tr. In-ta yadern. fiz. AN KazSSR, no. 4, 1961, 116-121)

TEXT: The experiments on determining the coefficient of external friction are described. They were carried out by means of a slitted striker, developed by the authors, as well as by the shear method suggested by I.M. Pavlov and P. S. Kostychev. Cylindrical samples 20 mm high and 16 mm in diameter made of annealed Cu,  $\angle 80$  (L80) and  $\angle 62$  (L62) brass and argentan were used. To determine the extension of the adhesion zone special experiments were done: a number of circles was drawn on the contact surface and that part of it was determined which was not deformed. The results obtained are presented on diagrams in the form of dependences of the coefficient of external friction and the degree of deformation. The regularities in the changes of the coefficient of external friction, determined on both devices, practically coincide; at low degrees

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The experimental determination ...

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A052/A101

of deformation (under 10%) the coefficients of external friction are very near to 0.5; at equal degrees of deformation the coefficients of external friction coincide for different alloys, and with the increase of the degree of deformation the coefficient of external friction decreases in all cases tending to a value lower than 0.1. At high rates of deformation the values of the coefficient of external friction are equal. In cases of maximum extension of the adhesion zone the coefficient of external friction has the highest value, consequently exactly to the adhesion zone correspond the highest coefficients of external friction. The authors maintain that their experiments have proved the existence of two kinds of friction: of the adhesion friction with the coefficient of external friction of  $\sim 0.5$  and of the sliding friction with the coefficient of external friction several times lower, and that the opinion of A. I. Tselikov and A. A. Korolev about the inconstancy of the coefficient of external friction and its relatively low value in the adhesion zone should be considered as an erroneous one. See RZhMet, 1961, 6I321. There are 15 references.

V. Perenots

[Abstracter's note: Complete translation]

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VINNITSKIY, A.A.; PRESNYAKOV, A.A.

Characteristics of friction during rolling. Trudy Inst. met. i  
obog. AN Kazakh. SSR 7:122-133 '63. (MIRA 17:6)

PRESNYAEV, A.A.; VINNITSKIY, A.A.

Nature of slippage in rolling. Izv. AN Kazakh SSR. Ser. fiz.-mat. nauk.  
1961. no. 3: 5-98 '61. (MIRA 15:1)  
(Rolling (Metalwork))

VINNITSKIY, A.A.; PRESNYAKOV, A.A.

Experimental investigation of coefficients of friction in  
upsetting. Trudy Inst. iad. fiz. AN Kazakh. SSR 4:116-121 '61.  
(MIRA 14:8)

(Forging) (Friction)

PIANKI, V.L.; VINNITSKIY, A.M.

Cardiac conditioned reflexes in fish with removed cerebellum.  
Dokl. AN SSSR 164 no.6:1432-1435 6 '65.

(MIRA 18:10)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova i  
Vysshaya sel'skokhozyaystvennaya shkola, Ol'shina, Isl'skaya  
Narodnaya Respublika.

MIRONOV, S.A., doktor tekhn. nauk, prof.; MALININA, L.A., kand. tekhn. nauk; FEDOROV, V.A., inzh.; KAYSER, L.A., inzh.; KRONCAUZ, S.D., kand. tekhn. nauk; PANFILOVA, L.I., kand. tekhn. nauk; SEMENOV, L.A., doktor tekhn. nauk, prof.; PODUROVSKIY, N.I., kand. tekhn. nauk; VINNITSKIY, A.M., kand. tekhn. nauk; KLIMOVA, G.D., red. izd-va; SHEVCHENKO, T.N., tekhn. red.

[Instructions on curing concrete and reinforced concrete products at plants and building sites]Instruktsiia po preparivaniu betonnykh i zhelezobetonnykh izdelii na zavodakh i poligonakh. Moskva, Gosstroizdat, 1962. 33 p. (MIRA 15:12)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut betona i zhelezobetona, Perovo. 2. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Mironov).  
(Precast concrete--Curing) (Autoclaves)

VINNITSKIY, A.M., kand.tekhn.nauk; IVANOV, V.A., inzh.

Wavy destruction of highly viscous and anomalously viscous jets.  
Izv.vys.ucheb.zav.; mashinostr. no.1:13-23 '61. (MIRA 14:4)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni Baumana.  
(Jets---Fluid dynamics)

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S/145/61/000/001/002/006  
D294/D303

AUTHORS:

Vinnitskiy, A.M., Candidate of Technical Sciences,  
and Ivanov, V.A., Engineer

TITLE:

Undulatory destruction of high-viscous and anomal-  
viscous streams

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Mashino-  
stroyeniye, no. 1, 1961, 13-23

TEXT: In this work the mechanism of undulatory destruction of a stream under the action of gasodynamic forces is analyzed, and equations expressing development of undulatory deformations are derived. It is shown that one of determining disturbances of undulatory disintegration is the oscillation of the fitting from which the stream flows. Parameters of stream, considered from the point of view of its range of flight before destruction takes place, are analyzed. Results of experimental research of undulatory destructions are presented. The author cites a work by Heinlein (Ref. 1: Forschung auf dem Gebiete des Ingenieurwesens, X  
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Undulatory destruction of ...

Berlin, April, 1931, no. 4), which analyzes the destruction of non-flooded viscous streams at different outflow speeds, and establishes 3 forms of destruction: 1 - axis-symmetrical disintegration into drops; 2 - undulatory disintegration of stream; 3 - spraying. During research streams of water, glycerin, gas oil and castor oil, flowing out of nozzles 0.1 to 1 mm in diameter, at speeds from 3 to 73 m/sec, were tested. A graph of this research is given. On the basis of the assumption about the causes of undulatory stream deflection development, a method of modeling the process of stream bending is worked out. The application of this method permitted taking, with the help of high-speed camera, clear pictures of the process of deformation. On the strength of calculations, the author states that aerodynamic or gasodynamic force determines the undulatory deformation of high-viscous streams. This force is located in the plane of curvature of the stream symmetry axis. The equation determining the movement of an ideal-viscous stream is solved by Ye.V. Kuvshinskiy (Ref. 8: Doktorskaya dissertatsiya. Izucheniye istecheniya rastvorov

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Undulatory destruction of ...

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vysokopolimerov (A Study on Outflow of High-Polymer Solutions. Doctor's dissertation). Leningradskiy fiziko-tekhnicheskii in-t AN SSSR, 1950). Deformation of stream can be considered as deformation of expansion and contraction of liquid layer by cross-forces. There are 7 figures and 9 references: 6 Soviet-bloc and 3 non-Soviet-bloc.

ASSOCIATION: MVTU im. Bauman

SUBMITTED: September 19, 1960

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VINNITSKIY, A.R. (Kiyev)

Review of D.G. Shefer's book "Diencephalic syndromes."  
Vrach. delo no.12:136 D '63. (MIRA 17:2)

VINITSKIY, A.R.; PANCHENKO, D.I. (Kiyev)

Review of E.V. Shmidt's book "Stenosis and thrombosis of the carotid arteries and disorders of the cerebral blood circulation." Vrach. delo no.11:150-151 N°63 (MIRA 16:12)

VINNITSKIY, A.R., dotsent

Problems of the pathogenesis of polyneuritis caused by exposure to low temperatures and endarteritis. Vrach. delo  
no.6:17-23 Je'63. (MIRA 16:9)

1. Kafedra nervnykh bolezney No.1 (zav. - prof. D.I.Panchenko)  
'Kiyevskogo instituta usovershenstvovaniya vrachey.  
(NEURITIS, MULTIPLE) (ARTERIES—DISEASES)  
(CLIMATOLOGY, MEDICAL)